

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

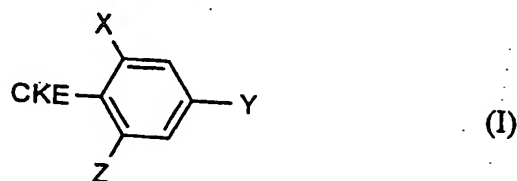
- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Patent claims

1. Compounds of the formula (I)



5

in which

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulphanyl, alkylsulphonyl, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy or phenylalkylthio,

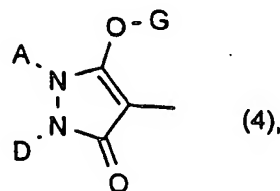
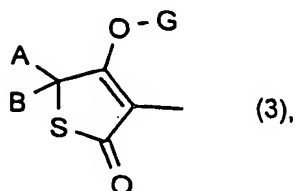
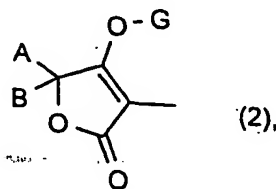
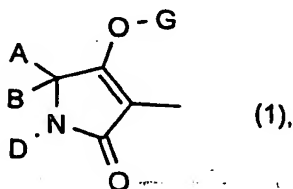
10

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,

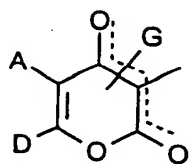
15

Z represents hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

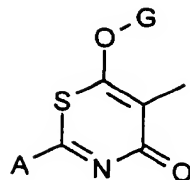
CKE represents one of the groups



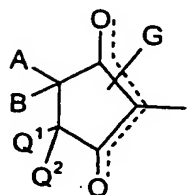
20



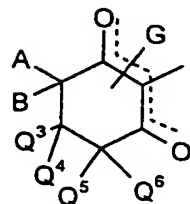
(5),



(6),



(7) or



(8),

in which

5

A represents hydrogen, in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl, alkylthioalkyl, saturated or unsaturated, optionally substituted cycloalkyl in which optionally at least one ring atom is replaced by a heteroatom, or in each case optionally halogen-, alkyl-, halogenoalkyl-, alkoxy-, halogenoalkoxy-, cyano- or nitro-substituted aryl, arylalkyl or hetaryl,

10

B represents hydrogen, alkyl or alkoxyalkyl, or

15

A and B together with the carbon atom to which they are attached represent a saturated or unsaturated unsubstituted or substituted cycle which optionally contains at least one heteroatom,

20

D represents hydrogen or an optionally substituted radical selected from the series consisting of alkyl, alkenyl, alkynyl, alkoxyalkyl, polyalkoxyalkyl, alkylthioalkyl, saturated or unsaturated cycloalkyl in which one or more ring members are

optionally replaced by heteroatoms, arylalkyl, aryl, hetaryl-alkyl or hetaryl or

5

A and D together with the atoms to which they are attached represent a saturated or unsaturated cycle which is unsubstituted or substituted in the A,D moiety and which optionally contains at least one (in the case where CKE = (4)) further heteroatom, or

10

A and Q¹ together represent alkanediyl or alkenediyl, each of which is optionally substituted by in each case optionally substituted alkyl, hydroxyl, alkoxy, alkylthio, cycloalkyl, benzyloxy or aryl, or

15

Q¹ represents hydrogen or alkyl,

Q², Q⁴, Q⁵ and Q⁶ independently of one another each represent hydrogen or alkyl,

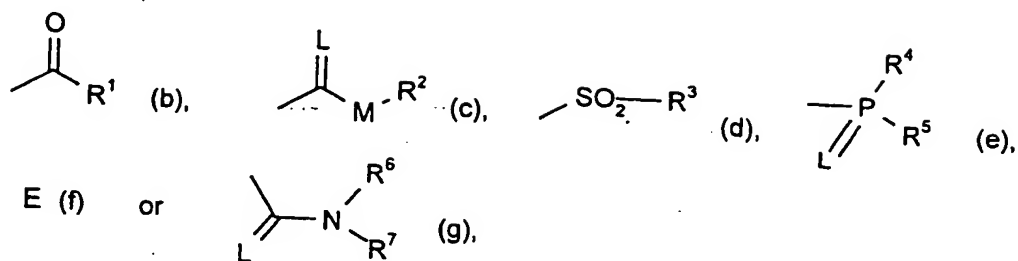
20

Q³ represents hydrogen, alkyl, alkoxyalkyl, alkylthioalkyl, optionally substituted cycloalkyl (in which optionally one methylene group is replaced by oxygen or sulphur) or optionally substituted phenyl, or

25

Q³ and Q⁴ together with the carbon atom to which they are attached represent a saturated or unsaturated unsubstituted or substituted cycle which optionally contains a heteroatom,

G represents hydrogen (a) or represents one of the groups



in which

5 E represents a metal ion equivalent or an ammonium ion,

L represents oxygen or sulphur,

M represents oxygen or sulphur,

10 R¹ represents in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, polyalkoxyalkyl or optionally halogen-, alkyl- or alkoxy-substituted cycloalkyl which may be interrupted by at least one heteroatom, in each case optionally substituted phenyl, phenylalkyl, hetaryl, phenoxyalkyl or hetaryloxyalkyl,

15 R² represents in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl or represents in each case optionally substituted cycloalkyl, phenyl or benzyl,

20 R³, R⁴ and R⁵ independently of one another each represent in each case optionally halogen-substituted alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio, cyclo-

25

alkylthio and represent in each case optionally substituted phenyl, benzyl, phenoxy or phenylthio,

5

R^6 and R^7 independently of one another each represent hydrogen, in each case optionally halogen-substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, represent optionally substituted phenyl, represent optionally substituted benzyl, or together with the nitrogen atom to which they are attached represent a cycle which is optionally interrupted by oxygen or sulphur.

10

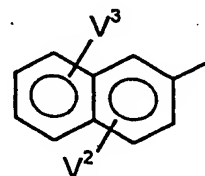
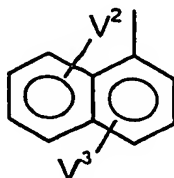
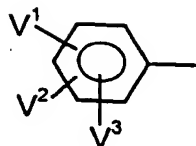
2. Compounds of the formula (I) according to Claim 1 in which

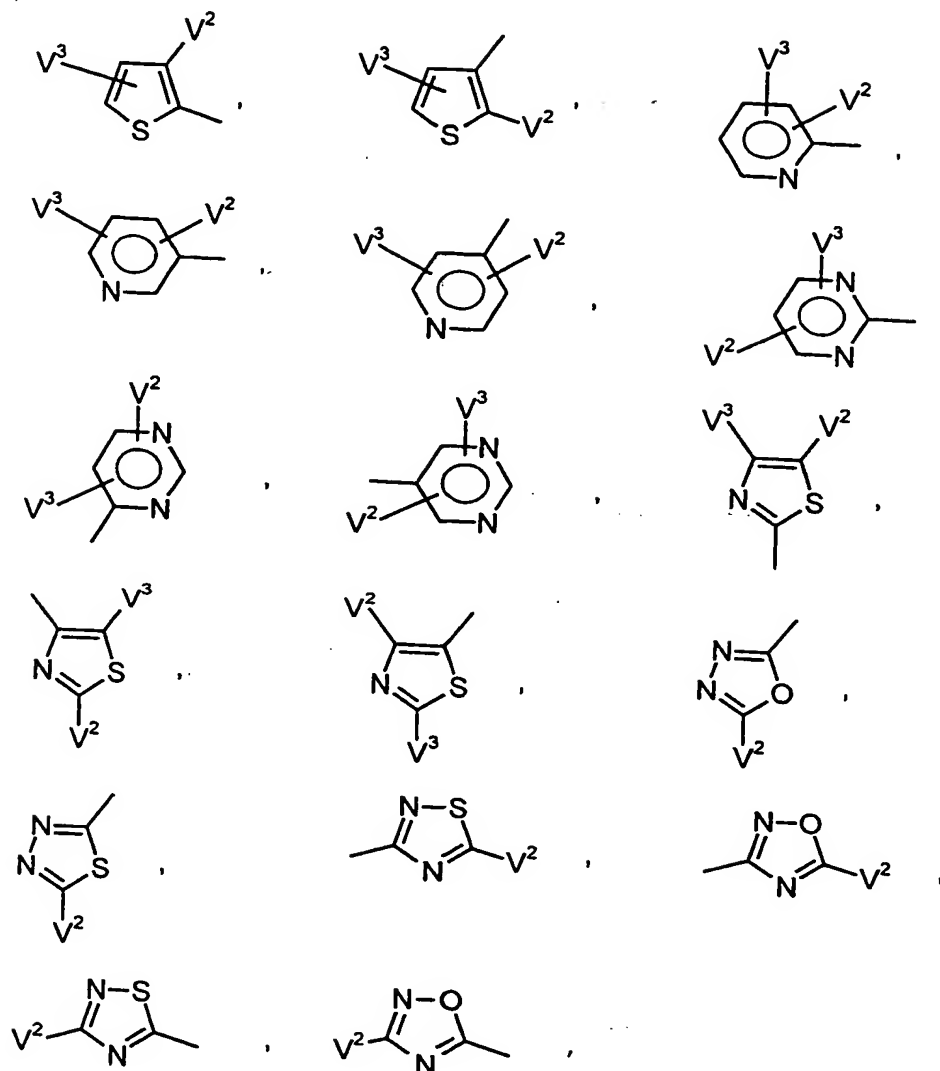
15

X represents halogen, C_1 - C_6 -alkyl, C_1 - C_6 -halogenoalkyl, C_1 - C_6 -alkoxy, C_3 - C_6 -alkenyloxy, C_1 - C_6 -alkylthio, C_1 - C_6 -alkylsulphinyl, C_1 - C_6 -alkylsulphonyl, C_1 - C_6 -halogenoalkoxy, C_3 - C_6 -halogeno-alkenyloxy, nitro, cyano or in each case optionally halogen-, C_1 - C_6 -alkyl-, C_1 - C_6 -alkoxy-, C_1 - C_4 -halogenoalkyl-, C_1 - C_4 -halogenoalkoxy-, nitro- or cyano-substituted phenyl, phenoxy, phenylthio, benzyloxy or benzylthio,

20

Y represents one of the radicals





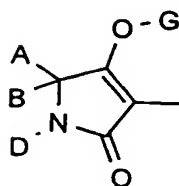
V¹ represents hydrogen, halogen, C₁-C₁₂-alkyl, C₁-C₆-alkoxy, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy, nitro, cyano or phenyl, phenoxy, phenoxy-C₁-C₄-alkyl, phenyl-C₁-C₄-alkoxy, phenylthio-C₁-C₄-alkyl or phenyl-C₁-C₄-alkylthio, each of which is optionally mono- or polysubstituted by halogen, C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy, nitro or cyano,

V² and V³ independently of one another each represent hydrogen, halogen, C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₄-halogenoalkyl or C₁-C₄-halogenoalkoxy,

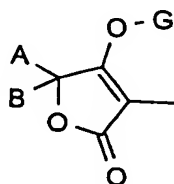
5

Z represents hydrogen, halogen, C₁-C₆-alkyl, C₁-C₆-halogenoalkyl, C₁-C₆-alkoxy, C₁-C₆-halogenoalkoxy, nitro or cyano,

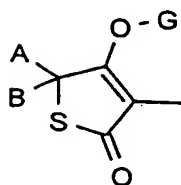
CKE represents one of the groups



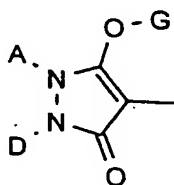
(1),



(2),

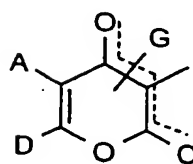


(3),

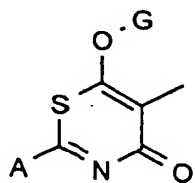


(4),

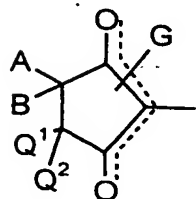
10



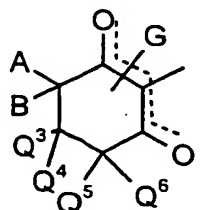
(5),



(6),



(7),



(8),

15

A represents hydrogen or in each case optionally halogen-substituted C₁-C₁₂-alkyl, C₃-C₈-alkenyl, C₁-C₁₀-alkoxy-C₁-C₈-alkyl, poly-

C₁-C₈-alkoxy-C₁-C₈-alkyl, C₁-C₁₀-alkylthio-C₁-C₆-alkyl,
optionally halogen-, C₁-C₆-alkyl- or C₁-C₆-alkoxy-substituted C₃-
C₈-cycloalkyl in which optionally one or two not directly adjacent
ring members are replaced by oxygen and/or sulphur or represents in
each case optionally halogen-, C₁-C₆-alkyl-, C₁-C₆-halogenoalkyl-,
C₁-C₆-alkoxy-, C₁-C₆-halogenoalkoxy-, cyano- or nitro-substituted
C₆- or C₁₀-aryl, hetaryl having 5 to 6 ring atoms or C₆- or C₁₀-aryl-
C₁-C₆-alkyl,

B represents hydrogen, C₁-C₁₂-alkyl or C₁-C₈-alkoxy-C₁-C₆-alkyl or

A, B and the carbon atom to which they are attached represent saturated
C₃-C₁₀-cycloalkyl or unsaturated C₅-C₁₀-cycloalkyl in which
optionally one ring member is replaced by oxygen or sulphur and
which are optionally mono- or disubstituted by C₁-C₈-alkyl, C₃-C₁₀-
cycloalkyl, C₁-C₈-halogenoalkyl, C₁-C₈-alkoxy, C₁-C₈-alkylthio,
halogen or phenyl or

A, B and the carbon atom to which they are attached represent C₃-C₆-
cycloalkyl which is substituted by an alkylenediyl group which
optionally contains one or two not directly adjacent oxygen and/or
sulphur atoms, or by an alkylenedioxyl group or by an alkylene-
dithiyl group which, together with the carbon atom to which it is
attached, forms a further five- to eight-membered ring, or

A, B and the carbon atom to which they are attached represent C₃-C₈-
cycloalkyl or C₅-C₈-cycloalkenyl, in which two substituents together
with the carbon atoms to which they are attached represent in each
case optionally C₁-C₆-alkyl-, C₁-C₆-alkoxy- or halogen-substituted
C₂-C₆-alkanediyl, C₂-C₆-alkenediyl or C₄-C₆-alkanedienediyl in

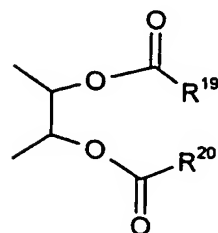
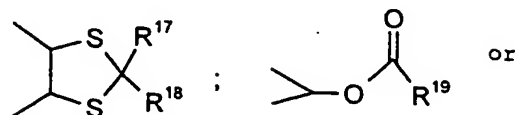
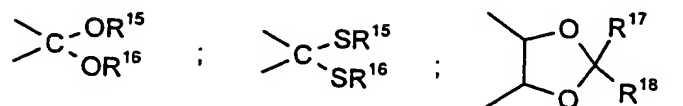
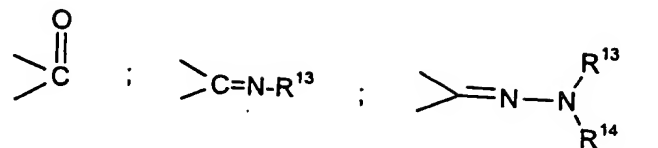
which optionally one methylene group is replaced by oxygen or sulphur,

5 D represents hydrogen, in each case optionally halogen-substituted C₁-C₁₂-alkyl, C₃-C₈-alkenyl, C₃-C₈-alkinyl, C₁-C₁₀-alkoxy-C₂-C₈-alkyl, poly-C₁-C₈-alkoxy-C₂-C₈-alkyl, C₁-C₁₀-alkylthio-C₂-C₈-alkyl, optionally halogen-, C₁-C₄-alkyl-, C₁-C₄-alkoxy- or C₁-C₄-halogenoalkyl-substituted C₃-C₈-cycloalkyl in which optionally one
10 ring member is replaced by oxygen or sulphur or in each case optionally halogen-, C₁-C₆-alkyl-, C₁-C₆-halogenoalkyl-, C₁-C₆-alkoxy-, C₁-C₆-halogenoalkoxy-, cyano- or nitro-substituted phenyl, hetaryl having 5 or 6 ring atoms, phenyl-C₁-C₆-alkyl or hetaryl-C₁-C₆-alkyl having 5 or 6 ring atoms, or

15 A and D together represent in each case optionally substituted C₃-C₆-alkanediyl or C₃-C₆-alkenediyl in which optionally one methylene group is replaced by oxygen or sulphur,

possible substituents in each case being:

20 halogen, hydroxyl, mercapto or in each case optionally halogen-substituted C₁-C₁₀-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio, C₃-C₇-cycloalkyl, phenyl or benzyloxy, or a further C₃-C₆-alkanediyl grouping, C₃-C₆-alkenediyl grouping or a butadienyl grouping which is optionally substituted by C₁-C₆-alkyl or in which optionally two
25 adjacent substituents together with the carbon atoms to which they are attached form a further saturated or unsaturated cycle having 5 or 6 ring atoms (in the case of the compound of the formula (I-1), A and D, together with the atoms to which they are attached, then represent, for example, the groups AD-1 to AD-10 mentioned further below) which
30 cycle may contain oxygen or sulphur, or which may optionally contain one of the groups below

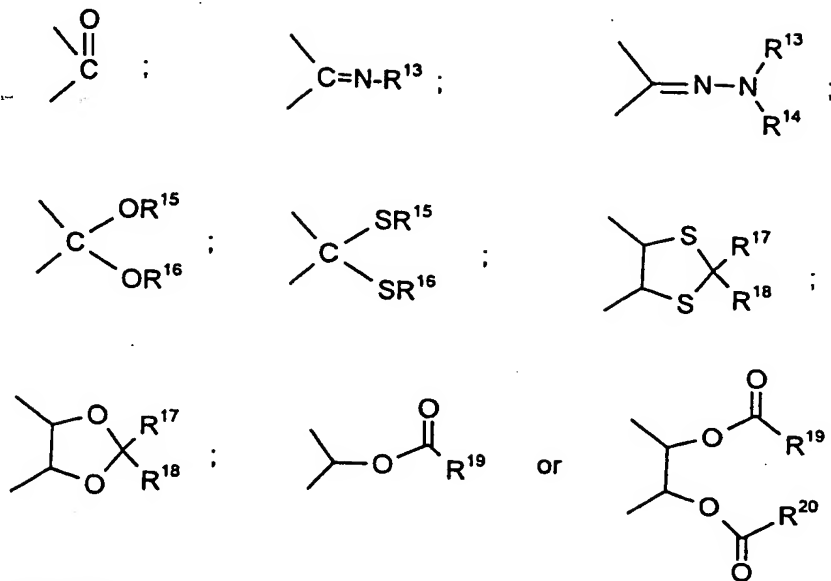


or

5

A and Q¹ together represent C₃-C₆-alkanediyl or C₄-C₆-alkenediyl, each of which is optionally mono- or disubstituted by identical or different substituents selected from the group consisting of halogen, hydroxyl; C₁-C₁₀-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio, C₃-C₇-cycloalkyl, each of which is optionally mono- to trisubstituted by identical or different halogens; and benzyloxy and phenyl, each of which is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen, C₁-C₆-alkyl or C₁-C₆-alkoxy, and which furthermore optionally contains one of the groups below

10



or is bridged by a C₁-C₂-alkanediyl group or by an oxygen atom, or

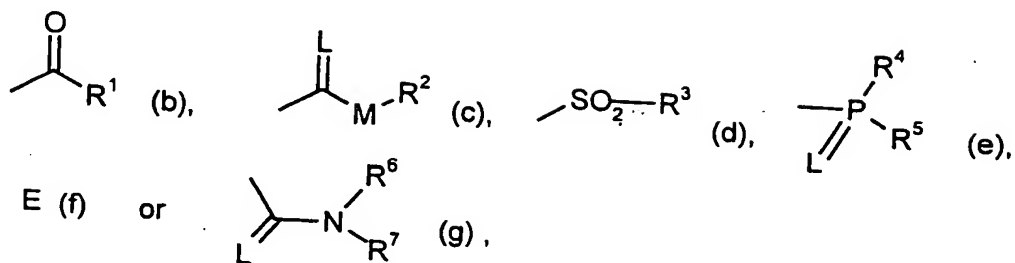
Q¹ represents hydrogen or C₁-C₄-alkyl,

Q², Q⁴, Q⁵ and Q⁶ independently of one another each represent hydrogen or C₁-C₄-alkyl,

Q³ represents hydrogen, C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₂-alkyl, C₁-C₆-alkylthio-C₁-C₂-alkyl, optionally C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted C₃-C₈-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur or optionally halogen-, C₁-C₄-alkyl-, C₁-C₄-alkoxy-, C₁-C₂-halogenoalkyl-, C₁-C₂-halogenoalkoxy-, cyano- or nitro-substituted phenyl, or

Q³ and Q⁴ together with the carbon atom to which they are attached represent optionally C₁-C₄-alkyl-, C₁-C₄-alkoxy- or C₁-C₂-halogenoalkyl-substituted C₃-C₇-cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur,

G represents hydrogen (a) or represents one of the groups



in which

E represents a metal ion or an ammonium ion,

L represents oxygen or sulphur and

M represents oxygen or sulphur,

R¹ represents in each case optionally halogen-substituted C₁-C₂₀-alkyl, C₂-C₂₀-alkenyl, C₁-C₈-alkoxy-C₁-C₈-alkyl, C₁-C₈-alkylthio-C₁-C₈-alkyl, poly-C₁-C₈-alkoxy-C₁-C₈-alkyl or optionally halogen-, C₁-C₆-alkyl- or C₁-C₆-alkoxy-substituted C₃-C₈-cycloalkyl in which optionally one or more not directly adjacent ring members are replaced by oxygen and/or sulphur,

represents optionally halogen-, cyano-, nitro-, C₁-C₆-alkyl-, C₁-C₆-alkoxy-, C₁-C₆-halogenoalkyl-, C₁-C₆-halogenoalkoxy-, C₁-C₆-alkylthio- or C₁-C₆-alkylsulphonyl-substituted phenyl,

represents optionally halogen-, nitro-, cyano-, C₁-C₆-alkyl-, C₁-C₆-alkoxy-, C₁-C₆-halogenoalkyl- or C₁-C₆-halogenoalkoxy-substituted phenyl-C₁-C₆-alkyl,

represents optionally halogen- or C₁-C₆-alkyl-substituted 5- or 6-membered hetaryl,

represents optionally halogen- or C₁-C₆-alkyl-substituted phenoxy-
C₁-C₆-alkyl or

represents optionally halogen-, amino- or C₁-C₆-alkyl-substituted 5-
or 6-membered hetaryloxy-C₁-C₆-alkyl,

R² represents in each case optionally halogen-substituted C₁-C₂₀-alkyl,
C₂-C₂₀-alkenyl, C₁-C₈-alkoxy-C₂-C₈-alkyl, poly-C₁-C₈-alkoxy-
C₂-C₈-alkyl,

represents optionally halogen-, C₁-C₆-alkyl- or C₁-C₆-alkoxy-
substituted C₃-C₈-cycloalkyl or

represents in each case optionally halogen-, cyano-, nitro-, C₁-C₆-
alkyl-, C₁-C₆-alkoxy-, C₁-C₆-halogenoalkyl- or C₁-C₆-halogeno-
alkoxy-substituted phenyl or benzyl,

R³ represents optionally halogen-substituted C₁-C₈-alkyl or represents in
each case optionally halogen-, C₁-C₆-alkyl-, C₁-C₆-alkoxy-, C₁-C₄-
halogenoalkyl-, C₁-C₄-halogenoalkoxy-, cyano- or nitro-substituted
phenyl or benzyl,

R⁴ and R⁵ independently of one another each represent in each case
optionally halogen-substituted C₁-C₈-alkyl, C₁-C₈-alkoxy, C₁-C₈-
alkylamino, di-(C₁-C₈-alkyl)amino, C₁-C₈-alkylthio, C₂-C₈-alkenyl-
thio, C₃-C₇-cycloalkylthio or represent in each case optionally
halogen-, nitro-, cyano-, C₁-C₄-alkoxy-, C₁-C₄-halogenoalkoxy-,
C₁-C₄-alkylthio-, C₁-C₄-halogenoalkylthio-, C₁-C₄-alkyl- or C₁-C₄-
halogenoalkyl-substituted phenyl, phenoxy or phenylthio,

R⁶ and R⁷ independently of one another each represent hydrogen, represent in each case optionally halogen-substituted C₁-C₈-alkyl, C₃-C₈-cycloalkyl, C₁-C₈-alkoxy, C₃-C₈-alkenyl, C₁-C₈-alkoxy-C₁-C₈-alkyl, represent optionally halogen-, C₁-C₈-halogenoalkyl-, C₁-C₈-alkyl- or C₁-C₈-alkoxy-substituted phenyl, optionally halogen-, C₁-C₈-alkyl-, C₁-C₈-halogenoalkyl- or C₁-C₈-alkoxy-substituted benzyl or together represent an optionally C₁-C₄-alkyl-substituted C₃-C₆-alkylene radical in which optionally one carbon atom is replaced by oxygen or sulphur,

R¹³ represents hydrogen, represents in each case optionally halogen-substituted C₁-C₈-alkyl or C₁-C₈-alkoxy, represents optionally halogen-, C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted C₃-C₈-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur, or represents in each case optionally halogen-, C₁-C₆-alkyl-, C₁-C₆-alkoxy-, C₁-C₄-halogenoalkyl-, C₁-C₄-halogenoalkoxy-, nitro- or cyano-substituted phenyl, phenyl-C₁-C₄-alkyl or phenyl-C₁-C₄-alkoxy,

R¹⁴ represents hydrogen or C₁-C₈-alkyl, or

R¹³ and R¹⁴ together represent C₄-C₆-alkanediyl,

R¹⁵ and R¹⁶ are identical or different and each represent C₁-C₆-alkyl, or

R¹⁵ and R¹⁶ together represent a C₂-C₄-alkanediyl radical which is optionally substituted by C₁-C₆-alkyl, C₁-C₆-halogenoalkyl or by optionally halogen-, C₁-C₆-alkyl-, C₁-C₄-halogenoalkyl-, C₁-C₆-alkoxy-, C₁-C₄-halogenoalkoxy-, nitro- or cyano-substituted phenyl,

R¹⁷ and R¹⁸ independently of one another each represent hydrogen, represent optionally halogen-substituted C₁-C₈-alkyl or represent optionally halogen-, C₁-C₆-alkyl-, C₁-C₆-alkoxy-, C₁-C₄-halogeno-alkyl-, C₁-C₄-halogenoalkoxy-, nitro- or cyano-substituted phenyl, or

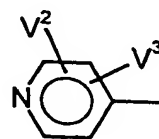
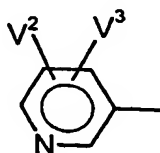
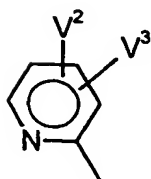
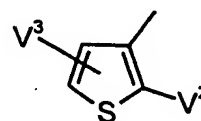
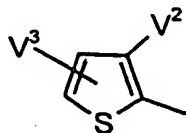
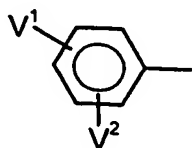
R¹⁷ and R¹⁸ together with the carbon atom to which they are attached represent a carbonyl group or represent optionally halogen-, C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted C₅-C₇-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur and

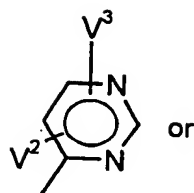
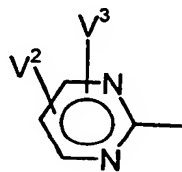
R¹⁹ and R²⁰ independently of one another each represent C₁-C₁₀-alkyl, C₂-C₁₀-alkenyl, C₁-C₁₀-alkoxy, C₁-C₁₀-alkylamino, C₃-C₁₀-alkenylamino, di-(C₁-C₁₀-alkyl)amino or di-(C₃-C₁₀-alkenyl)amino.

3. Compounds of the formula (I) according to Claim 1 in which

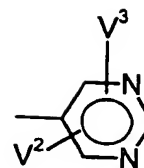
X represents fluorine, chlorine, bromine, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₃-C₄-alkenyloxy, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy, C₃-C₄-halogenoalkenyloxy, nitro or cyano,

Y represents one of the radicals





or

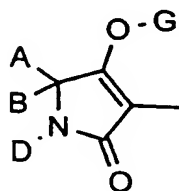


V¹ represents hydrogen, fluorine, chlorine, bromine, C₁-C₆-alkyl, C₁-C₄-alkoxy, C₁-C₂-halogenoalkyl, C₁-C₂-halogenoalkoxy, nitro, cyano or phenyl, phenoxy, phenoxy-C₁-C₂-alkyl, phenyl-C₁-C₂-alkoxy, phenylthio-C₁-C₂-alkyl or phenyl-C₁-C₂-alkylthio, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₂-halogenoalkyl, C₁-C₂-halogenoalkoxy, nitro or cyano,

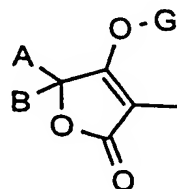
V² and V³ independently of one another each represent hydrogen, fluorine, chlorine, bromine, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₂-halogenoalkyl or C₁-C₂-halogenoalkoxy,

Z represents hydrogen, fluorine, chlorine, bromine, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-alkoxy or C₁-C₄-halogenoalkoxy,

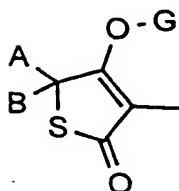
CKE represents one of the groups



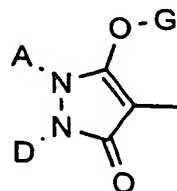
(1),



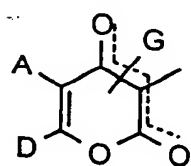
(2),



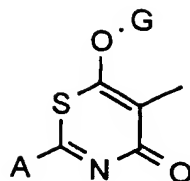
(3),



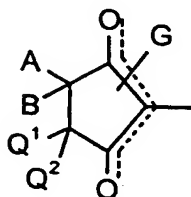
(4),



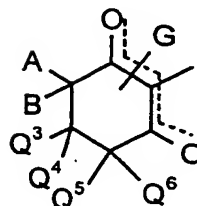
(5),



(6),



(7),



(8)

5

10

15

A represents hydrogen, in each case optionally fluorine- or chlorine-substituted C₁-C₁₀-alkyl, C₁-C₈-alkoxy-C₁-C₆-alkyl, optionally fluorine-, chlorine-, C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted C₃-C₇-cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur or (but not in the case of the compounds of the formulae (I-5), (I-7) and (I-8)) in each case optionally fluorine-, chlorine-, bromine-, C₁-C₄-alkyl-, C₁-C₄-halogenoalkyl-, C₁-C₄-alkoxy- or C₁-C₄-halogenoalkoxy-substituted phenyl, furanyl, pyridyl, imidazolyl, triazolyl, pyrazolyl, pyrimidyl, thiazolyl, thienyl or phenyl-C₁-C₄-alkyl,

B represents hydrogen or C₁-C₆-alkyl, or

20

A, B and the carbon atom to which they are attached represent saturated or unsaturated C₅-C₇-cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur and which is optionally mono-substituted by C₁-C₆-alkyl, C₅-C₈-cycloalkyl, C₁-C₃-halogenoalkyl, C₁-C₆-alkoxy, fluorine, chlorine or phenyl, or

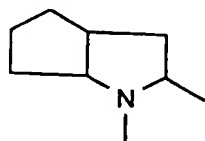
A, B and the carbon atom to which they are attached represent C₅-C₆-cycloalkyl which is substituted by an alkylenediyl group which optionally contains one or two not directly adjacent oxygen or sulphur atoms or by an alkylenedioxyl group or by an alkylenedithiol group which, together with the carbon atom to which it is attached, forms a further five- or six-membered ring, or

A, B and the carbon atom to which they are attached represents C₃-C₆-cycloalkyl or C₅-C₆-cycloalkenyl in which two substituents together with the carbon atoms to which they are attached represent in each case optionally C₁-C₅-alkyl-, C₁-C₅-alkoxy-, fluorine-, chlorine- or bromine-substituted C₂-C₄-alkanediyl, C₂-C₄-alkenediyl, in which optionally one methylene group is replaced by oxygen or sulphur, or butadienediyl,

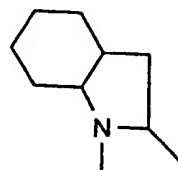
D represents hydrogen, represents in each case optionally fluorine- or chlorine-substituted C₁-C₁₀-alkyl, C₃-C₆-alkenyl, C₁-C₈-alkoxy-C₂-C₆-alkyl or C₁-C₈-alkylthio-C₂-C₆-alkyl, represents optionally fluorine-, chlorine-, C₁-C₄-alkyl-, C₁-C₄-alkoxy- or C₁-C₂-halogenoalkyl-substituted C₃-C₇-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur or (but not in the case of the compounds of the formulae (I-1) and (I-4)) represents in each case optionally fluorine-, chlorine-, bromine-, C₁-C₄-alkyl-, C₁-C₄-halogenoalkyl-, C₁-C₄-alkoxy- or C₁-C₄-halogenoalkoxy-substituted phenyl, furanyl, imidazolyl, pyridyl, thiazolyl, pyrazolyl, pyrimidyl, pyrrolyl, thienyl, triazolyl or phenyl-C₁-C₄-alkyl, or

A and D together represent optionally substituted C₃-C₅-alkanediyl in which one methylene group may be replaced by a carbonyl group, oxygen or sulphur, possible substituents being hydroxyl, C₁-C₆-alkyl or C₁-C₄-alkoxy, or

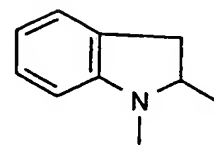
A and D (in the case of the compounds of the formula (I-1)) together with the atoms to which they are attached represent one of the groups AD-1 to AD-10:



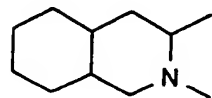
AD-1



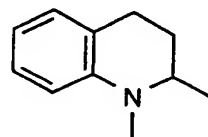
AD-2



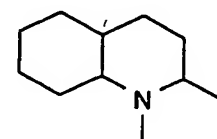
AD-3



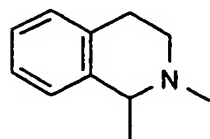
AD-4



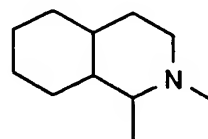
AD-5



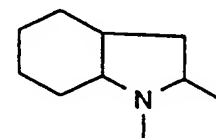
AD-6



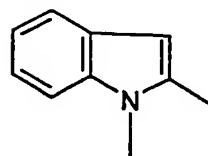
AD-7



AD-8



AD-9



AD-10

5

or

A and Q¹ together represent C₃-C₄-alkanediyl or C₃-C₄-alkenediyl, each of which is optionally mono- or disubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine,

10

hydroxyl, and C₁-C₈-alkyl and C₁-C₄-alkoxy, each of which is optionally mono- to trisubstituted by fluorine, or

Q¹ represents hydrogen,

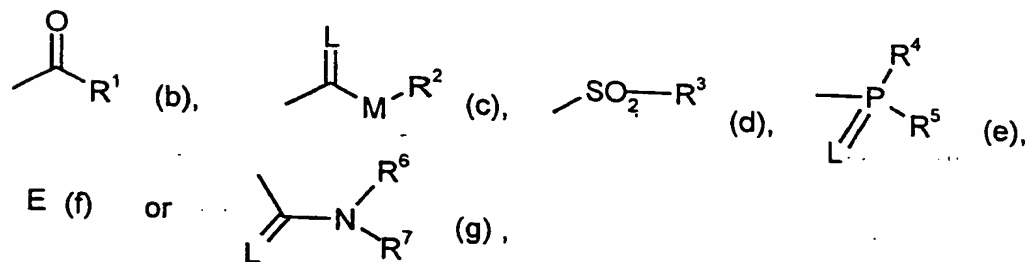
Q² represents hydrogen,

Q⁴, Q⁵ and Q⁶ independently of one another each represent hydrogen or C₁-C₃-alkyl,

Q³ represents hydrogen, C₁-C₄-alkyl, C₁-C₄-alkoxy-C₁-C₂-alkyl, C₁-C₄-alkylthio-C₁-C₂-alkyl or optionally methyl- or methoxy-substituted C₃-C₆-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur, or

Q³ and Q⁴ together with the carbon atom to which they are attached represent an optionally C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted saturated C₅-C₆-cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur,

G represents hydrogen (a) or represents one of the groups



in which

E represents a metal ion or an ammonium ion,

L represents oxygen or sulphur and

M represents oxygen or sulphur,

5 R¹ represents in each case optionally fluorine- or chlorine-substituted
C₁-C₁₆-alkyl, C₂-C₁₆-alkenyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-
alkylthio-C₁-C₆-alkyl, poly-C₁-C₆-alkoxy-C₁-C₆-alkyl or optionally
10 fluorine-, chlorine-, C₁-C₅-alkyl- or C₁-C₅-alkoxy-substituted
C₃-C₇-cycloalkyl in which optionally one or two not directly adjacent
ring members are replaced by oxygen and/or sulphur,

15 represents optionally fluorine-, chlorine-, bromine-, cyano-, nitro-,
C₁-C₄-alkyl-, C₁-C₄-alkoxy-, C₁-C₃-halogenoalkyl-, C₁-C₃-
halogenoalkoxy-, C₁-C₄-alkylthio- or C₁-C₄-alkylsulphonyl-
substituted phenyl,

20 represents optionally fluorine-, chlorine-, bromine-, C₁-C₄-alkyl-,
C₁-C₄-alkoxy-, C₁-C₃-halogenoalkyl- or C₁-C₃-halogenoalkoxy-
substituted phenyl-C₁-C₄-alkyl,

25 represents in each case optionally fluorine-, chlorine-, bromine- or
C₁-C₄-alkyl-substituted pyrazolyl, thiazolyl, pyridyl, pyrimidyl,
furanyl or thienyl,

30 represents optionally fluorine-, chlorine-, bromine- or C₁-C₄-alkyl-
substituted phenoxy-C₁-C₃-alkyl or

represents in each case optionally fluorine-, chlorine-, bromine-,
amino- or C₁-C₄-alkyl-substituted pyridyloxy-C₁-C₃-alkyl,
pyrimidyloxy-C₁-C₃-alkyl or thiazolyloxy-C₁-C₃-alkyl,

R² represents in each case optionally fluorine-substituted C₁-C₁₆-alkyl, C₂-C₁₆-alkenyl, C₁-C₆-alkoxy-C₂-C₆-alkyl or poly-C₁-C₆-alkoxy-C₂-C₆-alkyl,

5 represents optionally fluorine-, chlorine-, C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted C₃-C₇-cycloalkyl or

10 represents in each case optionally fluorine-, chlorine-, bromine-, cyano-, nitro-, C₁-C₄-alkyl-, C₁-C₃-alkoxy-, C₁-C₃-halogenoalkyl- or C₁-C₃-halogenoalkoxy-substituted phenyl or benzyl,

15 R³ represents optionally fluorine-substituted C₁-C₆-alkyl or represents in each case optionally fluorine-, chlorine-, bromine-, C₁-C₄-alkyl-, C₁-C₄-alkoxy-, C₁-C₃-halogenoalkyl-, C₁-C₃-halogenoalkoxy-, cyano- or nitro-substituted phenyl or benzyl,

20 R⁴ and R⁵ independently of one another each represent C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, di-(C₁-C₆-alkyl)amino, C₁-C₆-alkylthio, C₃-C₄-alkenylthio, C₃-C₆-cycloalkylthio or represent in each case optionally fluorine-, chlorine-, bromine-, nitro-, cyano-, C₁-C₃-alkoxy-, C₁-C₃-halogenoalkoxy-, C₁-C₃-alkylthio-, C₁-C₃-halogenoalkylthio-, C₁-C₃-alkyl- or C₁-C₃-halogenoalkyl-substituted phenyl, phenoxy or phenylthio, and

25 R⁶ and R⁷ independently of one another each represent hydrogen, C₁-C₆-alkyl, C₃-C₆-cycloalkyl, C₁-C₆-alkoxy, C₃-C₆-alkenyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, represent optionally fluorine-, chlorine-, bromine-, C₁-C₃-halogenoalkyl-, C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted phenyl, represent optionally fluorine-, chlorine-, bromine-, C₁-C₄-alkyl-, C₁-C₃-halogenoalkyl- or C₁-C₄-alkoxy-substituted benzyl, or together represent an optionally methyl- or ethyl-substituted

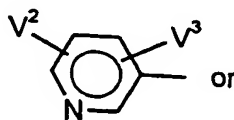
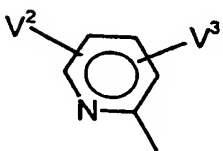
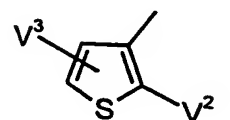
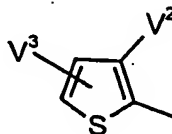
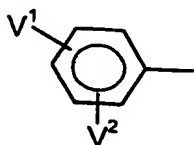
30

C₄-C₅-alkylene radical in which optionally one methylene group is replaced by oxygen or sulphur.

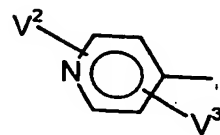
4. Compounds of the formula (I) according to Claim 1 in which

X represents fluorine, chlorine, methyl, ethyl, propyl, iso-propyl, methoxy, ethoxy, propoxy, iso-propoxy, trifluoromethyl, difluoromethoxy, trifluoromethoxy, nitro or cyano,

Y represents one of the radicals



or

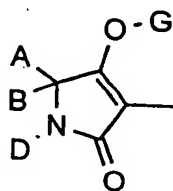


V¹ represents hydrogen, fluorine, chlorine, bromine, methyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, tert-butyl, methoxy, ethoxy, n-propoxy, iso-propoxy, trifluoromethyl, trifluoromethoxy, nitro, cyano or phenyl,

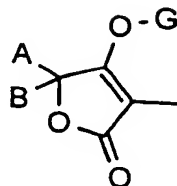
V² and V³ independently of one another each represent hydrogen, fluorine, chlorine, methyl, ethyl, n-propyl, iso-propyl, methoxy, ethoxy, trifluoromethyl or trifluoromethoxy,

Z represents hydrogen, fluorine, chlorine, methyl, ethyl, n-propyl, methoxy, ethoxy or n-propoxy,

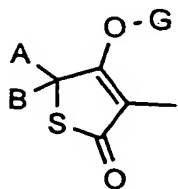
CKE represents one of the groups



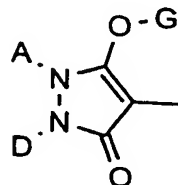
(1),



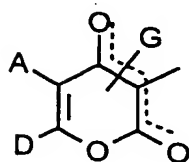
(2),



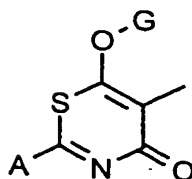
(3),



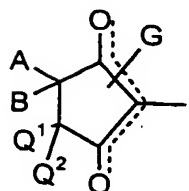
(4),



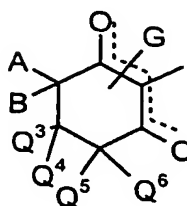
(5),



(6),



(7),



(8),

A represents hydrogen, in each case optionally fluorine-substituted C₁-C₈-alkyl or C₁-C₆-alkoxy-C₁-C₄-alkyl, optionally fluorine-, methyl-, ethyl- or methoxy-substituted C₃-C₆-cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur or (but not in the case of the compounds of the formulae (I-5), (I-7) and (I-8)) represents in each case optionally fluorine-, chlorine-, bromine-, methyl-, ethyl-, n-propyl-, iso-propyl-, methoxy-, ethoxy-, trifluoromethyl-, trifluoromethoxy-, cyano- or nitro-substituted phenyl or benzyl,

B represents C_1 - C_4 -alkyl, or

5 A, B and the carbon atom to which they are attached represent saturated C_5 - C_6 -cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur and which is optionally monosubstituted by methyl, ethyl, n-propyl, isopropyl, butyl, iso-butyl, sec-butyl, tert-butyl, trifluoromethyl, methoxy, ethoxy, n-propoxy, iso-propoxy, n-butoxy, iso-butoxy, sec-butoxy, tert-butoxy, fluorine or chlorine, or

10 A, B and the carbon atom to which they are attached represent C_5 - C_6 -cycloalkyl in which two substituents together with the carbon atoms to which they are attached represent C_2 - C_4 -alkanediyl or C_2 - C_4 -alkenediyl in which in each case optionally one methylene group is replaced by oxygen or sulphur, or, butadienediyl,

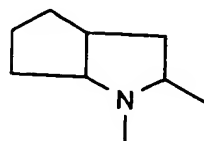
15 D represents hydrogen, represents in each case optionally fluorine- or chlorine-substituted C_1 - C_8 -alkyl, C_3 - C_4 -alkenyl, C_1 - C_6 -alkoxy- C_2 - C_4 -alkyl, C_1 - C_4 -alkylthio- C_2 - C_4 -alkyl or C_3 - C_6 -cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur or (but not in the case of the compounds of the formulae (I-1) and (I-4)) represents in each case optionally fluorine-, chlorine-, methyl-, ethyl-, n-propyl-, iso-propyl-, methoxy-, ethoxy-, trifluoromethyl- or trifluoromethoxy-substituted phenyl, furanyl, pyridyl, thienyl or benzyl,

20 or

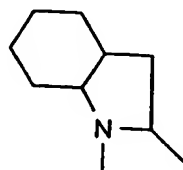
25 A and D together represent optionally substituted C_3 - C_4 -alkanediyl in which optionally one carbon atom is replaced by sulphur and which is optionally substituted by hydroxyl, methyl, ethyl, methoxy or ethoxy, or

30

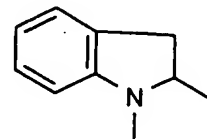
A and D (in the case of the compounds of the formula (I-1)) together with the atoms to which they are attached represent one of the following groups AD:



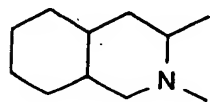
AD-1



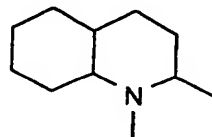
AD-2



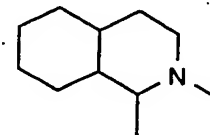
AD-3



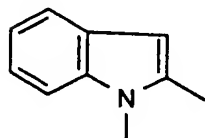
AD-4



AD-6



AD-8



AD-10

5

A and Q¹ together represent C₃-C₄-alkanediyl or butenediyl, each of which is optionally mono- or disubstituted by fluorine, hydroxyl, methyl or methoxy, or

10

Q¹ represents hydrogen,

Q² represents hydrogen,

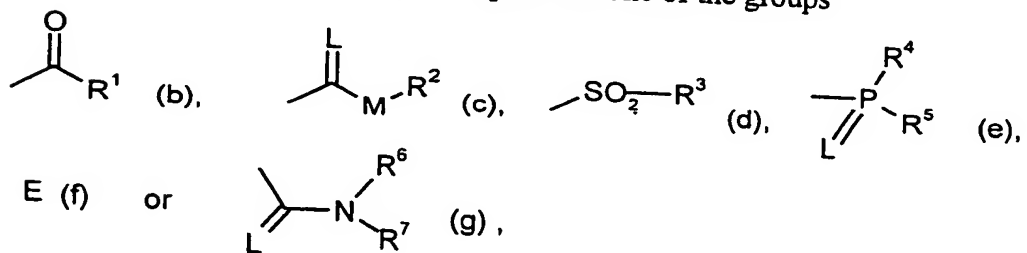
Q⁴, Q⁵ and Q⁶ independently of one another each represent hydrogen, methyl or ethyl,

15

Q³ represents hydrogen, methyl, ethyl or C₃-C₆-cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur, or

Q³ and Q⁴ together with the carbon atom to which they are attached represent optionally methyl- or methoxy-substituted saturated C₅-C₆-cycloalkyl in which optionally one ring member is replaced by oxygen or sulphur,

G represents hydrogen (a) or represents one of the groups



in which

E represents a metal ion or an ammonium ion,

L represents oxygen or sulphur and

M represents oxygen or sulphur,

R¹ represents in each case optionally fluorine- or chlorine-substituted C₁-C₁₄-alkyl, C₂-C₁₄-alkenyl, C₁-C₄-alkoxy-C₁-C₆-alkyl, C₁-C₄-alkylthio-C₁-C₆-alkyl, poly-C₁-C₄-alkoxy-C₁-C₄-alkyl or optionally fluorine-, chlorine-, methyl-, ethyl-, n-propyl-, i-propyl-, n-butyl-, i-butyl-, tert-butyl-, methoxy-, ethoxy-, n-propoxy- or iso-propoxy-substituted C₃-C₆-cycloalkyl in which optionally one or two not directly adjacent ring members are replaced by oxygen and/or sulphur,

represents optionally fluorine-, chlorine-, bromine-, cyano-, nitro-, methyl-, ethyl-, n-propyl-, i-propyl-, methoxy-, ethoxy-, trifluoromethyl-, trifluoromethoxy-, methylthio-, ethylthio-, methylsulphonyl- or ethylsulphonyl-substituted phenyl,

5

represents optionally fluorine-, chlorine-, bromine-, methyl-, ethyl-, n-propyl-, i-propyl-, methoxy-, ethoxy-, trifluoromethyl- or trifluoromethoxy-substituted benzyl,

10

represents in each case optionally fluorine-, chlorine-, bromine-, methyl- or ethyl-substituted furanyl, thienyl, pyridyl, pyrimidyl, thiazolyl or pyrazolyl,

15

represents optionally fluorine-, chlorine-, methyl- or ethyl-substituted phenoxy-C₁-C₂-alkyl or

20

represents in each case optionally fluorine-, chlorine-, amino-, methyl- or ethyl-substituted pyridyloxy-C₁-C₂-alkyl, pyrimidyloxy-C₁-C₂-alkyl or thiazolyloxy-C₁-C₂-alkyl,

R²

represents in each case optionally fluorine-substituted C₁-C₁₄-alkyl, C₂-C₁₄-alkenyl, C₁-C₄-alkoxy-C₂-C₆-alkyl or poly-C₁-C₄-alkoxy-C₂-C₆-alkyl,

25

represents optionally fluorine-, chlorine-, methyl-, ethyl-, n-propyl-, iso-propyl- or methoxy-substituted C₃-C₆-cycloalkyl,

30

or represents in each case optionally fluorine-, chlorine-, cyano-, nitro-, methyl-, ethyl-, n-propyl-, i-propyl-, methoxy-, ethoxy-, trifluoromethyl- or trifluoromethoxy-substituted phenyl or benzyl,

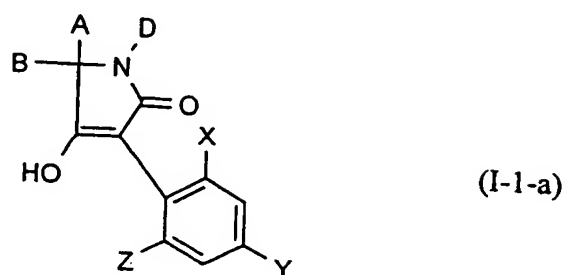
R³ represents in each case optionally fluorine-substituted methyl, ethyl, n-propyl, isopropyl or in each case optionally fluorine-, chlorine-, bromine-, methyl-, tert-butyl-, methoxy-, trifluoromethyl-, trifluoromethoxy-, cyano- or nitro-substituted phenyl or benzyl,

R⁴ and R⁵ independently of one another each represent C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-alkylamino, di-(C₁-C₄-alkyl)amino, C₁-C₄-alkylthio or represent in each case optionally fluorine-, chlorine-, bromine-, nitro-, cyano-, C₁-C₂-alkoxy-, C₁-C₂-fluoroalkoxy-, C₁-C₂-alkylthio-, C₁-C₂-fluoroalkylthio- or C₁-C₃-alkyl-substituted phenyl, phenoxy or phenylthio, and

R⁶ and R⁷ independently of one another each represent hydrogen, represent C₁-C₄-alkyl, C₃-C₆-cycloalkyl, C₁-C₄-alkoxy, C₃-C₄-alkenyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, represent optionally fluorine-, chlorine-, bromine-, trifluoromethyl-, methyl- or methoxy-substituted phenyl, represent optionally fluorine-, chlorine-, bromine-, methyl-, trifluoromethyl- or methoxy-substituted benzyl, or together represent a C₅-C₆-alkylene radical in which optionally one methylene group is replaced by oxygen or sulphur.

5. Process for preparing compounds of the formula (I) according to Claim 1, characterized in that

(A) Compounds of the formula (I-1-a)

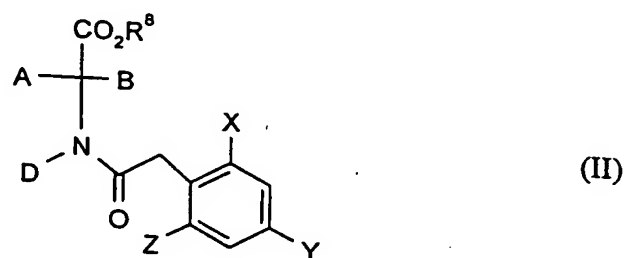


in which

A, B, D, X, Y and Z are each as defined in Claim 1

are obtained by the intramolecular condensation of

N-acylamino acid esters of the formula (II)



in which

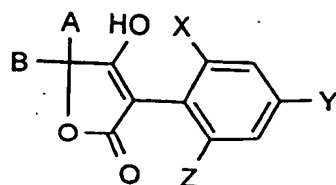
A, B, D, X, Y and Z are each as defined above,

and

R⁸ represents alkyl,

in the presence of a diluent and in the presence of a base,

(B) Compounds of the formula (I-2-a)



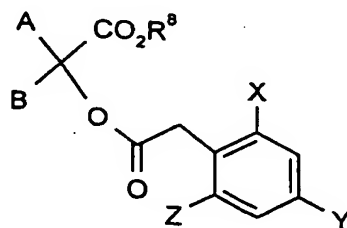
(I-2-a)

in which

A, B, X, Y and Z are each as defined above,

are obtained by the intramolecular condensation of

carboxylic esters of the formula (III)



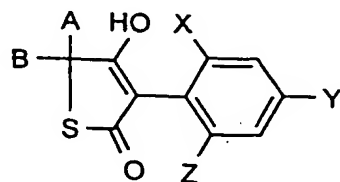
(III)

in which

A, B, X, Y, Z and R^8 are each as defined above,

in the presence of a diluent and in the presence of a base,

(C) Compounds of the formula (I-3-a)



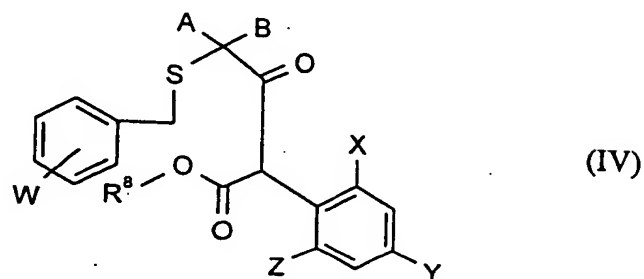
(I-3-a)

in which

A, B, X, Y and Z are each as defined above,
are obtained by the intramolecular cyclization of

5

β -ketocarboxylic esters of the formula (IV)



in which

10

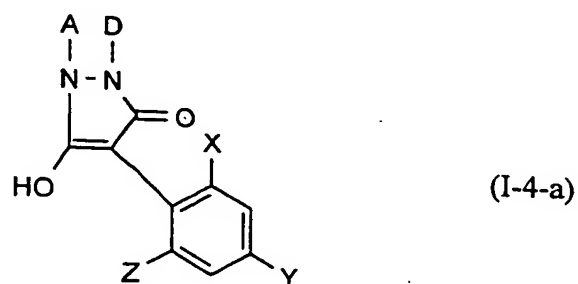
A, B, X, Y, Z and R⁸ are each as defined above and

W represents hydrogen, halogen, alkyl or alkoxy,

15

if appropriate in the presence of a diluent and in the presence of an acid,

(D) Compounds of the formula (I-4-a)



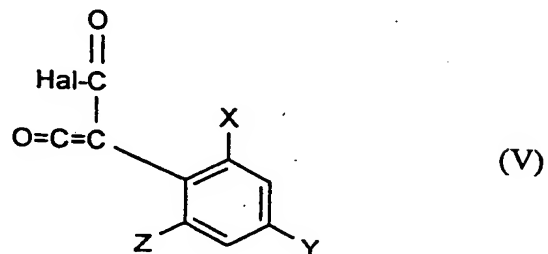
20

in which

A, D, X, Y and Z are each as defined above,

are obtained by reacting

- 5 (α) halogenocarbonyl ketenes of the formula (V)



in which

10 X, Y and Z are each as defined above

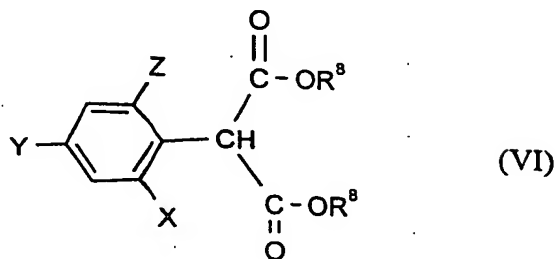
and

Hal represents halogen,

15

or by reacting

- 20 (β) malonic acid derivatives of the formula (VI)



20

in which

R^8 , X, Y and Z are each as defined above,

with hydrazines of the formula (VII)

5



(VII)

in which

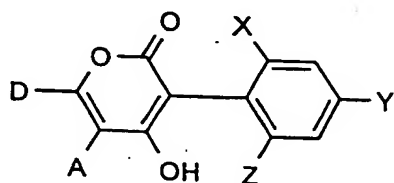
A and D are each as defined above,

10

if appropriate in the presence of a diluent and if appropriate in the presence of a base,

(E) Compounds of the formula (I-5-a)

15



(I-5-a)

in which

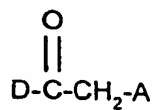
A, D, X, Y and Z are each as defined above,

20

are obtained by reacting

carbonyl compounds of the formula (VIII)

25



(VIII)

in which

A and D are each as defined above,

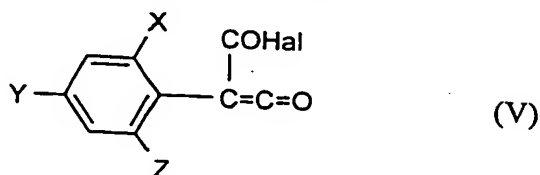
or their silyl enol ethers of the formula (VIIIa)



in which

A, D and R^8 are each as defined above,

with ketene acid halides of the formula (V)



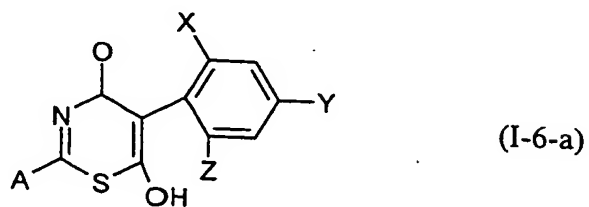
in which

X, Y and Z are each as defined above and

Hal represents halogen,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid acceptor,

(F) Compounds of the formula (I-6-a)



in which

A, X, Y and Z are each as defined above,

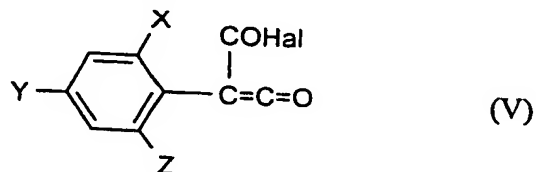
are obtained by reacting thioamides of the formula (IX)



in which

A is as defined above,

with ketene acid halides of the formula (V)

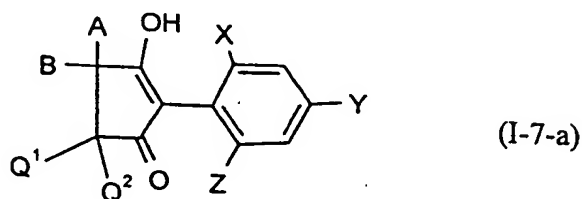


in which

Hal, X, Y and Z are each as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid acceptor,

(G) Compounds of the formula (I-7-a)

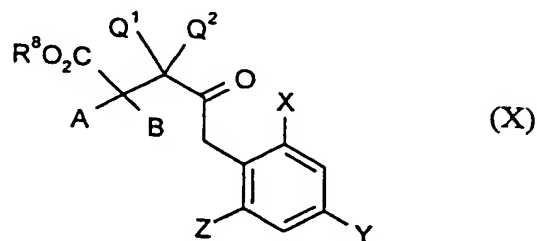


in which

A, B, Q¹, Q², W, X, Y and Z are each as defined in Claim 1

are obtained by intramolecular cyclization of

ketocarboxylic esters of the formula (X)



5

in which

A, B, Q¹, Q², X, Y and Z are each as defined above and

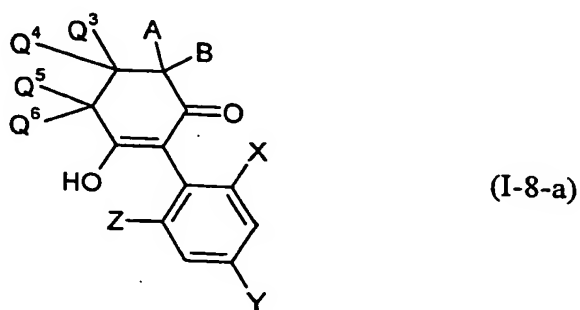
10

R⁸ represents alkyl,

if appropriate in the presence of a diluent and in the presence of a base,

15

(H) Compounds of the formula (I-8-a)



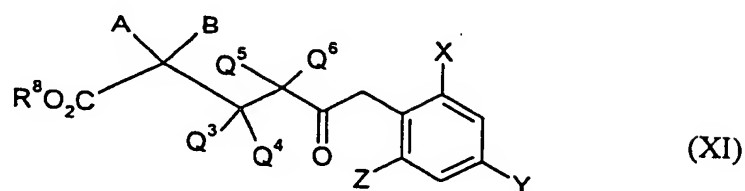
in which

20

A, B, Q³, Q⁴, Q⁵, Q⁶, X, Y and Z are each as defined in Claim 1

are obtained by intramolecular condensation of

6-aryl-5-keto-hexanoic esters of the formula (XI)



in which

A, B, Q³, Q⁴, Q⁵, Q⁶, X, Y and Z are each as defined above

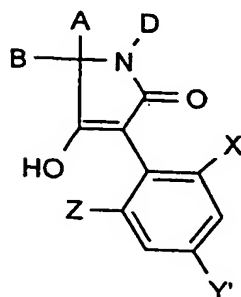
and

R⁸ represents alkyl,

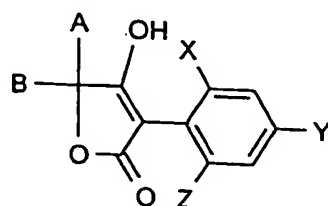
in the presence of a diluent and in the presence of a base,

- (I) Compounds of the formulae (I-8-a) shown above in which A, B, D, Q¹, Q², Q³, Q⁴, Q⁵, Q⁶, X, Y and Z are each as defined above are obtained by reacting compounds of the formulae (I-1'-a) to (I-8'-a),

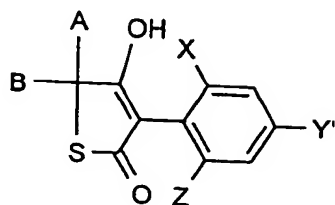
(I-1'-a):



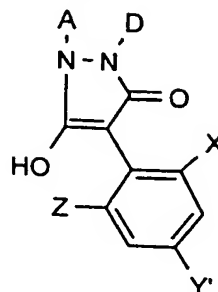
(I-2'-a):



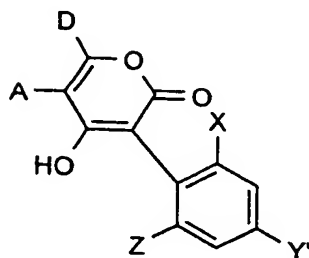
(I-3'-a):



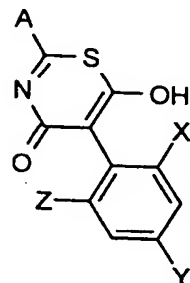
(I-4'-a):



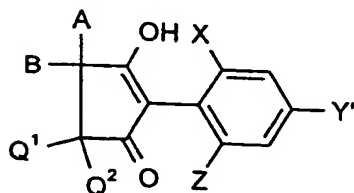
(I-5'-a):



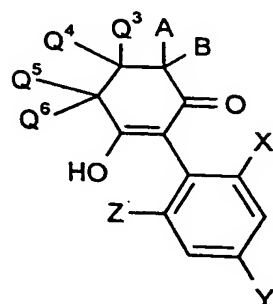
(I-6'-a):



(I-7'-a):



(I-8'-a):



in which

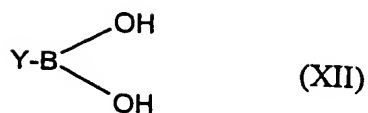
5

A, B, D, Q¹, Q², Q³, Q⁴, Q⁵, Q⁶, X and Z are each as defined above
and

Y' presents chlorine, bromine or iodine

10

with boronic acids of the formula (XII)

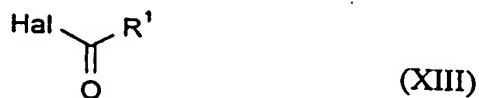


in which

Y is as defined above,

in the presence of a solvent, a base and a catalyst and subsequently reacting the resulting compounds of the formulae (I-1-a) to (I-8-a) in each case

(J α) with acyl halides of the formula (XIII)



in which

R¹ is as defined in Claim 1 and

Hal represents halogen

or

(B) with carboxylic anhydrides of the formula (XIV)



in which

R¹ is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder, or in each case

- 5 (K) with chloroformic esters or chloroformic thioesters of the formula (XV)



10 in which

R^2 and M are each as defined in Claim 1,

15 if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder, or in each case

- (L) with chloromonothioformic esters or chlorodithioformic esters of the formula (XVI)



20 in which

M and R^2 are each as defined above,

25 if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder, or in each case

- (M) with sulphonyl chlorides of the formula (XVII)



in which

R³ is as defined in Claim 1,

5 if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder, or in each case

(N) with phosphorus compounds of the formula (XVIII)



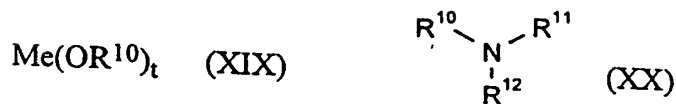
10 in which

L, R⁴ and R⁵ are each as defined in Claim 1 and

15 Hal represents halogen,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder, or in each case

20 (L) with metal compounds or amines of the formulae (XIX) or (XX)



in which

25 Me represents a mono- or divalent metal,

t represents the number 1 or 2 and

R¹⁰, R¹¹, R¹² independently of one another each represent hydrogen or alkyl,

if appropriate in the presence of a diluent, or in each case

(Pα) with isocyanates or isothiocyanates of the formula (XXI)

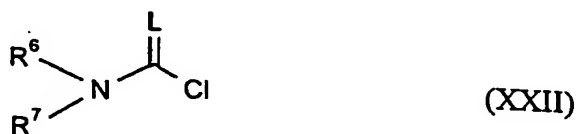


in which

R⁶ and L are each as defined in Claim 1,

if appropriate in the presence of a diluent and if appropriate in the presence of a catalyst, or in each case

(β) with carbamoyl chlorides or thiocarbamoyl chlorides of the formula (XXII)

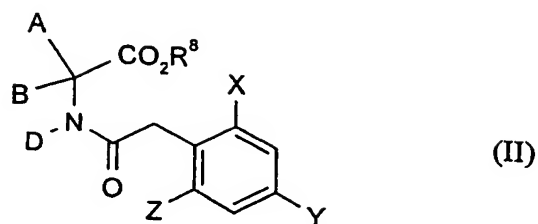


in which

L, R⁶ and R⁷ are each as defined in Claim 1,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder.

6. Compounds of the formula (II)

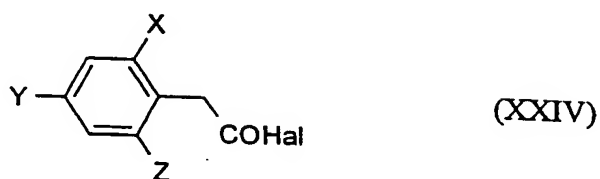


in which

A, B, D, X, Y and Z are each as defined in Claim 1 and

R⁸ represents alkyl.

7. Compounds of the formula (XXIV)

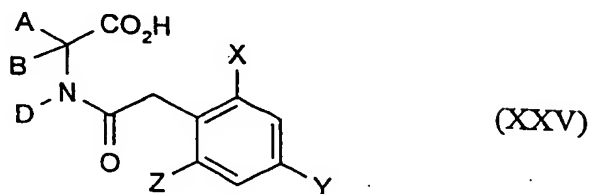


in which

X, Y and Z are each as defined in Claim 1 and

Hal represents chlorine or bromine.

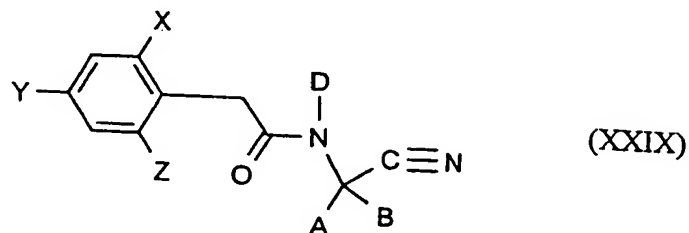
8. Compounds of the formula (XXV)



in which

A, B, D, X, Y and Z are each as defined in Claim 1.

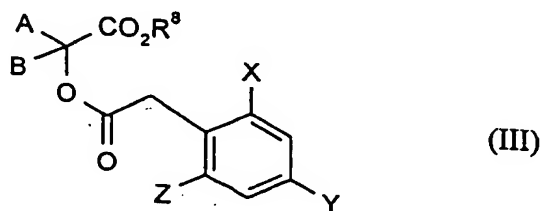
9. Compounds of the formula (XXIX)



in which

A, B, D, X, Y and Z are each as defined in Claim 1.

10. Compounds of the formula (III)

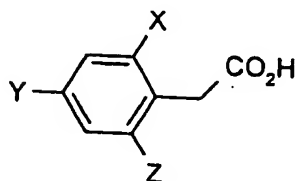


in which

A, B, X, Y and Z are each as defined above and

R⁸ represents alkyl.

11. Compounds of the formula (XXVII)



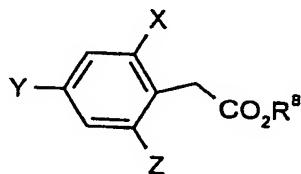
(XXVII)

in which

5

X, Y and Z are each as defined in Claim 1.

12. Compounds of the formula (XXXII)



(XXXII)

in which

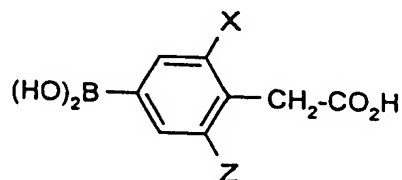
10

X, Y and Z are each as defined in Claim 1 and

15

R⁸ represents alkyl.

13. Compounds of the formula (XXVII-b)



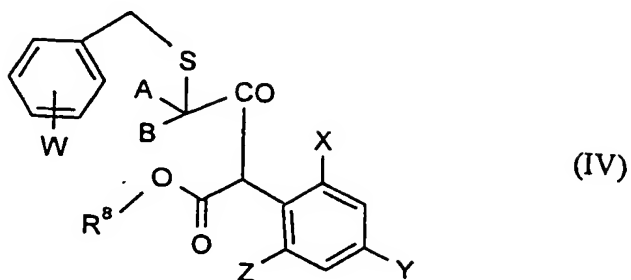
(XXVII-b)

in which

20

X and Z are each as defined in Claim 1.

14. Compounds of the formula (IV)

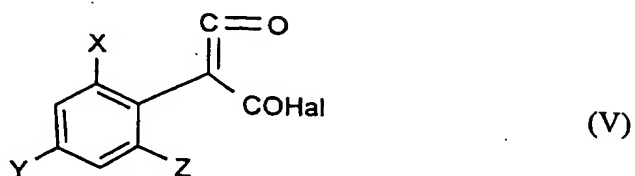


in which

A, B, W, X, Y and Z are each as defined in Claim 1 and

R⁸ represents alkyl.

15. Compounds of the formula (V)

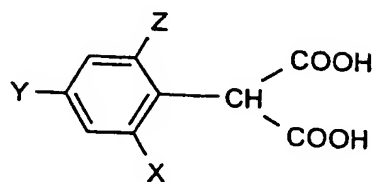


in which

X, Y and Z are each as defined in Claim 1 and

Hal represents chlorine or bromine.

16. Compounds of the formula (XXXVII)

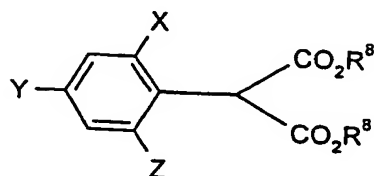


(XXXVII)

in which

X, Y and Z are each as defined in Claim 1.

17. Compounds of the formula (VI)



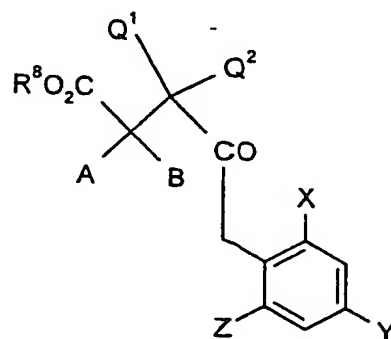
(VI)

in which

X, Y and Z are each as defined in Claim 1 and

R⁸ represents alkyl.

18. Compounds of the formula (X)



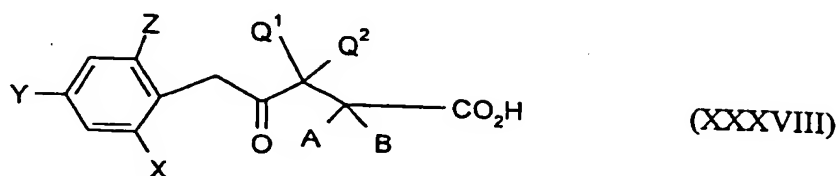
(X)

in which

A, B, Q¹, Q², X, Y and Z are each as defined in Claim 1 and

5 R⁸ represents alkyl.

19. Compounds of the formula (XXXVIII)

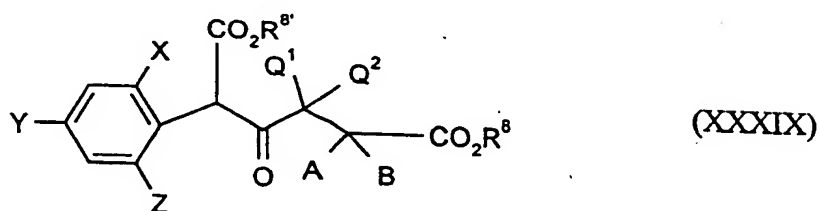


10 in which

X, Y, Z, A, B, Q¹ and Q² are each as defined in Claim 1.

20. Compounds of the formula (XXXIX)

15



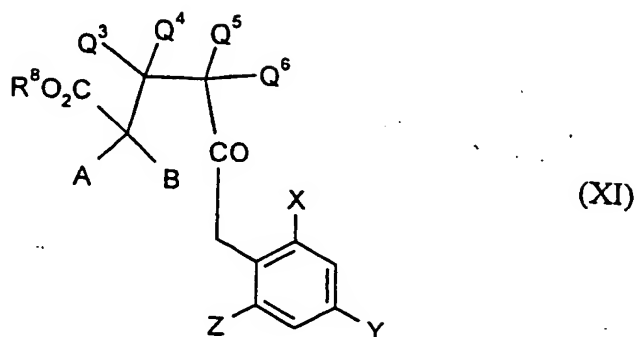
in which

A, B, D¹, D², X, Y and Z are each as defined in Claim 1 and

20

R⁸ and R^{8'} each represent alkyl.

21. Compounds of the formula (XI)

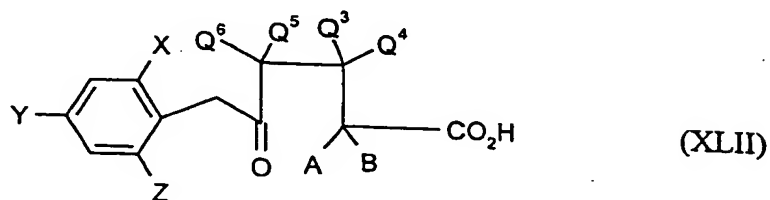


in which

A, B, Q³, Q⁴, Q⁵, Q⁶, X, Y and Z are each as defined in Claim 1 and

R⁸ represents alkyl.

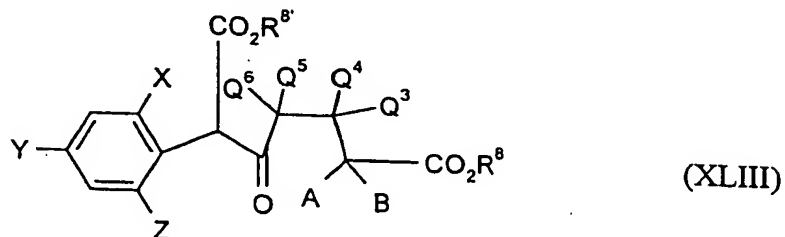
22. Compounds of the formula (XLII)



in which

A, B, Q³, Q⁴, Q⁵, Q⁶, X, Y and Z are each as defined in Claim 1.

23. Compounds of the formula (XLIII)



in which

A, B, Q³, Q⁴, Q⁵, Q⁶, X, Y and Z are each as defined in Claim 1 and

R⁸ and R^{8'} each represent alkyl.

24. Pesticides and/or herbicides, characterized in that they contain at least one compound of the formula (I) according to Claim 1.
25. The use of compounds of the formula (I) according to Claim 1 for controlling pests in crop protection, in the domestic sector, in the hygiene sector and in the protection of stored products.
26. Method for controlling pests in crop protection, in the domestic sector, in the hygiene sector and in the protection of stored products, characterized in that compounds of the formula (I) according to Claim 1 are allowed to act on the pests and/or their habitat.
27. Method for preparing pesticides and/or herbicides, characterized in that compounds of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.